

REMARKS

The present document is submitted in reply to the Office Action dated August 20, 2010 ("Office Action").

Applicant has amended claims 1 and 12, support for which can be found throughout the specification, e.g., on page 7, the table, page 8, the last sentence, and in original claim 1. Claims 2, 8-11, and 18-21 have been amended in line with the amendments to claims 1 and 12. Applicant reserves the right to pursue the subject matter of the originally filed claims in one or more continuing applications. Finally, new claims 35-38 have been added, support for which appears at least in original claims 8 and 33 and in the specification on page 7. No new matter has been introduced.

Upon entry of the above amendments, claims 1-21 and 35-38 will be pending and under examination. Applicant respectfully requests that the Examiner reconsider this application in view of the following remarks.

Rejection under 35 U.S.C. §103

The Examiner has rejected claims 1-21 under 35 U.S.C. §103(a) as allegedly being unpatentable over McKerracher, US Patent No. 7,141,428 ("McKerracher") in view of Schenck et al., US Patent No. 4,553,542 ("Schenck"), and optionally further in view of Cheng et al., US Patent No. 6,235,041 ("Cheng"). Office Action, pages 2-5.

Claims 1-21 are directed to methods for repairing or reconnecting nerve root avulsion using a fibrin glue mixture. For the sole purpose of accelerating prosecution, Applicant has amended certain claims where necessary to specify that the fibrin glue mixture is the only active agent used in the claimed methods and that it consists of four components: a growth factor, fibrinogen, aprotinin, and divalent calcium ions.

McKerracher, the primary reference, reports a kit for use in repairing damage in the nervous system. The kit contains (a) C3 or another Rho antagonist, and (b) matrix forming components such as fibrin glue or collagen gel. Abstract and Column 7, lines 39-50. According to this reference, C3 and other Rho antagonists are therapeutically effective in facilitating axon growth. It also reports that the fibrin glue or collagen gel forms an *in situ* matrix for delivery of C3 or the other Rho

antagonists. Column 1, lines 30-35, and Column 7, lines 39-50. In short, McKerracher discloses a method for repairing neuronal damage using a Rho antagonist such as C3 as the active agent and fibrin glue or collagen gel as the delivery means.

Claims 1-21 as amended, differ from McKerracher in at least one aspect. That is, McKerracher reports use of Rho antagonists as an active agent, while the claims as amended requires use of a Rho antagonist-free fibrin glue mixture as the only active agent. In other words, the claimed methods do not involve the use of any Rho antagonist for neuronal damage repair. Clearly, such methods are not taught by McKerracher.

To arrive at the claimed methods, one must modify the disclosures in McKerracher by at least removing the Rho antagonist from the neuronal repair treatment disclosed therein. However, as explicitly taught in McKerracher, the Rho antagonist is the therapeutically active agent useful in promoting axon growth. Abstract. In view of this teaching, a person skilled in the art would not have so modified the method reported in McKerracher because doing so would render the McKerracher treatment unsatisfactory for the intended purpose.

Of the other two cited references, Schenck reports an encircling device for anastomosing nerve sheaths (Abstract) and Cheng discloses a device for repairing a gap or defect in the central nervous system (Abstract). The Examiner relies on Schenck for providing teachings on suturing portions of the nervous system (Office Action, page 3, second paragraph) and relies on Cheng for providing teachings related to the specific growth factors recited in claim 3, the concentrations of the components in the fibrin glue mixture as required by claim 10, and the specific fibrin glue mixture recited in claim 11 (Office Action, pages 4-5). These teachings would not have prompted a person skilled in the art to modify the neuronal repair method of McKerracher in the manner discussed above, thereby arriving at the claimed method. They therefore cannot cure the deficiency in McKerracher as it relates to the amended claims.

For the reasons set forth above, Applicant points out that claims 1-21 are not obvious over McKerracher, Schenck, and Cheng, either taken alone or in combination. Withdrawal of this rejection is therefore respectfully requested.

New Claims

New claims 35-38 depend from claim 1 or claim 12, directly or indirectly. For the same reasons set forth above, these claims are not obvious over all of the cited references, either taken alone or in combination.

CONCLUSION


In view of the above remarks, Applicant believes that the pending claims, as amended, are in condition for allowance. Favorable consideration is therefore respectfully solicited.

Please charge our Credit Card in the amount of \$ 245 covering the time extension fee set forth under 37 CFR 1.17(a)(2). If this reply is not considered timely filed and a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee due and authorization is not provided elsewhere for such fee, including an extension fee, please charge our Deposit Account No. 23/2825, under Docket No. L0735.70003US00 from which the undersigned is authorized to draw.

Dated: 1/13/2011

Respectfully submitted,

By


Yahua Chen, Ph.D.
Registration No.: 55,055
WOLF, GREENFIELD & SACKS, P.C.
600 Atlantic Avenue
Boston, Massachusetts 02210-2206
617.646.8000